GOVERNMENT OF INDIA
NEW AND RENEWABLE ENERGY
LOK SABHA

UNSTARRED QUESTION NO:784
ANSWERED ON:28.04.2016
Technical Standards for Renewable Energy
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Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether the Government proposes to set technical standards for renewable energy, if so, the details thereof; and
(b) whether the Government has conducted resource assessment for renewable energy, if so, the details thereof; and

(c) the initiative taken by the Government for the effective use of information technology for renewable energy; and
(d) whether the Government proposes to issue guidelines for tariff design for different renewable energy technology and to develop state level model agencies for renewable energy, if so, the details thereof?

Answer

THE MINISTER OF STATE FOR POWER, COAL & NEW AND RENEWABLE ENERGY
(INDEPENDENT CHARGE) (SHRI PIYUSH GOYAL)
(a): The Ministry of New & Renewable Energy (MNRE) through research institutions has been setting technical standards from time to time for various renewable energy systems in consultation with the Bureau of Indian Standards (BIS). The technical standards are available for solar photovoltaic modules and systems, solar flat plate collector, solar cooker, bio CNG and biomass cookstoves. In wind energy and small hydro, International Standards published by International Electrotechnical Commission (IEC) are followed.
(b): Yes Madam. The MNRE through research institutions conducted resource assessment in biomass, solar energy, wind energy and small hydro. A Biomass Resource Atlas for India has been prepared for surplus agro residues by Indian Institute of Science (IISc), Bangalore in 2010 under a R&D project supported by MNRE. As per the report, 18GW power generation potential exists from surplus agricultural residues in the country. The wind resource assessment is conducted through National Institute of Wind Energy (NIWE), Chennai. 808 wind monitoring stations have been established in 32 States and UTs to assess the wind power potential. The NIWE has estimated the wind power potential of the country as 49 GW, 102 GW and 302 GW at 50 m, 80m & 100 m height, respectively. The ground validation of these wind power potential is in progress. In solar, the National Institute of Solar Energy (NISE), Gurgaon in 2014 carried out a study on estimating the state-wise solar potential in the country, which showed total solar power potential of 748.98 GW in the country. The MNRE
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has launched a nationwide Solar Radiation Resource Assessment (SRRA) for assessing solar potential in the country and to identify potential areas for harvesting the solar energy. This project is implemented jointly by NIWE and NISE. Under Phase-I of programme, 51 SRRA stations and in phase-II of programme, 60 SRRA stations and 4 Advanced Measurement Stations are installed at selected locations spread all over the country. The assessment of Small Hydro Power (SHP) potential was conducted through IIT, Roorkee. As per the report submitted by IIT, Roorkee in Jan, 2012, the assessment of 5815 potential sites showed aggregate capacity of about 16GW. However, in later stage, the potential of SHP sites in some of the states were reassessed by States themselves and, accordingly revised potential was estimated to be 19.75GW for 6474 sites.
(c): Intranet and Internet and web-based applications are being effectively used for renewable energy projects in India by MNRE, which includes use of satellite based applications, mobile network based real time data collections and analysis. The website of MNRE and its institutions provide all the necessary information for the various stakeholders involved in renewable energy development in India.
(d): The guidelines for tariff design for different renewable energy technologies are issued by State Electricity Regulatory Commission (SERC). The State Nodal Agencies are involved in the implementation of various renewable energy programmes in states.
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